

JON M. HUNTSMAN, JR. Governor

> GARY HERBERT Lieutenant Governor

### Department of **Environmental Quality**

William J. Sinclair Acting Executive Director

DIVISION OF AIR QUALITY Cheryl Heying Director

DAQE-IN0121420010-09

February 24, 2009

Robert Edwards Tru Crushing Inc. 71 East Wadsworth Park Drive Draper, UT 84020

Dear Mr. Edwards:

Re: Intent to Approve: Modification to Approval Order DAQE-AN0121420008-08 by Adding

Portable Aggregate Equipment; Portable Src County; CDS SM; NSPS (Part 60)

Project Number: N012142-0010

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Ms. Nicole Thorp, who may be reached at (801) 536-4014.

Sincerely,

Ty L. Howard, Manager New Source Review Section

TLH:NT:sa

cc: Salt Lake Valley Health Department

## STATE OF UTAH

# **Department of Environmental Quality**

# **Division of Air Quality**

# INTENT TO APPROVE: Modification to Approval Order DAQE-AN0121420008-08 by Adding Portable Aggregate Equipment

Prepared By: Ms. Nicole Thorp, Engineer

Phone: (801) 536-4014 Email: nthorp@utah.gov

#### INTENT TO APPROVE NUMBER

DAQE-IN0121420010-09

Date: February 24, 2009

**Portable Aggregate Equipment** 

Source Contact: Mr. Robert Edwards Phone: (801) 676-5350

Ty L. Howard, Manager New Source Review Section Utah Division of Air Quality

#### **ABSTRACT**

This AO is issued to Tru Crushing Inc., for the purpose of adding equipment to the portable equipment AO. These pieces of equipment belong to the non-metallic mineral processing industry. Sets of equipment chosen from the equipment approved in this AO shall be temporarily operated for a period of no more than 180 operating days in any calendar year at any site. Relocation shall not exceed 365 consecutive days at any location in the State of Utah. Prior to commencement of operation at a site, the source shall submit a Notice of Temporary Relocation to the Executive Secretary. If the plant operates, at a site, in compliance with the AO, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment. Compliance with the opacity limits and various operating practices listed in the conditions of the AO shall be considered as application of BACT. The emission control measures listed in the conditions of this AO shall apply to all of the sites at which the equipment approved by this AO operates. The source may be required to adopt additional measures for controlling emissions to address site-specific concerns. This AO shall indicate whether the equipment is subject to the NSPS, 40 CFR Part 60, Subpart OOO. The Temporary Relocation Approval Letter, which the source is required to possess prior to operation, shall list the allowable emissions and/or production limits for the relocation. This AO limits the source to emissions, which are below the major source threshold, making it a "Synthetic Minor" source. Other applicability factors may still apply. The terms and conditions of this AO are enforceable by both the State of Utah and the Federal Government.

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on February 28, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

#### Name of Permittee:

**Permitted Location:** 

Tru Crushing Inc.
71 East Wadsworth Park Drive
Draper, UT 84020

Tru Crushing Inc.: Portable Aggregate Equipment
Not permanently based at a site.
Portable Src, UT

#### **Section I: GENERAL PROVISIONS**

I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]

- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]. [R307-415-6b]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

#### Section II: SPECIAL PROVISIONS

#### II.A The approved installations shall consist of the following equipment:

II.A.1 Portable Aggregate Processing Plant

II.A.2 Cone Crusher

Capacity: 200 TPH

Make/Model: El Jay 54" Serial Number: 469

Manufacture Date: 1978

II.A.3 Cone Crusher

Capacity: 200 TPH

Make/Model: El Jay 54" Serial Number: 2310380

Manufacture Date: 1980

II.A.4 Cone Crusher

Capacity: 200 TPH

Make/Model: El Jay 54" Serial Number: 23C0282

Manufacture Date: 1982

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II.A.5 **Jaw Crusher** 

Make/Model: Cedarapids 1100 Manufacture Date: 2000

II.A.6 Impact Crusher

Capacity: 400 TPH

Make/Model: Crush Boss 5056 Manufacture Date: 2004

II.A.7 **Jaw Crusher** 

Capacity: 200 TPH

Make/Model: Cedarapids JP 3042

Manufacture Date: 1999

II.A.8 **Jaw Crusher Plant** 

Capacity: 500 TPH

Make/Model: Cedarapids MACS Serial Number: 54561, 54556, 54566

Serial Number: 47628

Manufacture Date: 2008

II.A.9 Cone Crusher Plant

Capacity: 500 TPH

Make/Model: Cedarapids MACS Serial Number: 54563, 54572

Manufacture Date: 2003

II.A.10 Cone Crusher Plant

Capacity: 500 TPH

Make/Model: Cedarapids MACS Serial Number: 54562, 54801

Manufacture Date: 2008

II.A.11 Cone Crusher

Capacity: 500 TPH

Make/Model: Cedarapids Serial Number: 55269

Manufacture Date: 2008

II.A.12 Cone Crusher

Capacity: 500 TPH

Make/Model: Cedarapids Serial Number: 54531

Manufacture Date: 2007

II.A.13 **Jaw Crusher** 

Capacity: 500 TPH

Make/Model: Cedarapids Serial Number: 54976

Manufacture Date: 2008

II.A.14 Diesel Generator

Capacity: 545 kW

Make/Model: Caterpillar 3412 Serial Number: 81Z24204

Manufacture Date: 2000

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II.A.15 **Diesel Generator** 

Capacity: 900 kW

Make/Model: Cummings

II.A.16 **Diesel Generator** 

Capacity: 900 kW

Make/Model: Cummings

II.A.17 **Diesel Generator** 

Capacity: 750 kW

Make/Model: Caterpillar Serial Number: 55426

Manufacture Date: 2007

II.A.18 **Diesel Generator** 

Capacity: 750 kW

Make/Model: Caterpillar Serial Number: TGC002356005

Manufacture Date: 2007

II.A.19 Screen

Capacity: 400 TPH

Make/Model: Cedarapids 6203 Serial Number: 52587

Manufacture Date: 2003

II.A.20 Screen

Capacity: 400 TPH

Make/Model: Screen Machine SM 516T Spyder

Manufacture Date: 2005

II.A.21 Screen

Capacity: 400 TPH

Make/Model: Cedarapids 6x20 TD Serial Number: P-6-20-3-309-06

Manufacture Date: 2006

II.A.22 Screen Plant

Capacity: 500 TPH

Make/Model: Cedarapids MACS Serial Number: 54565, 54569

Manufacture Date: 2008

II.A.23 Screen Plant

Capacity: 500 TPH

Make/Model: Cedarapids MACS Serial Number: 54564, 54882

Manufacture Date: 2008

II.A.24 Screen

Capacity: 500 TPH

Make/Model: Cedarapids Serial Number: 54636

Manufacture Date: 2008

II.A.25 Screen

Capacity: 500 TPH
Make/Model: Cedarapid

Make/Model: Cedarapids Serial Number: TRSX8203TCR8K0198

Manufacture Date: 2008

#### **II.B** Requirements and Limitations

#### II.B.1 The Portable Equipment listed in the AO shall be subject to the follow

- II.B.1.a The owner/operator shall operate and conduct its operations of aggregate processing plants in accordance with the terms and conditions of this AO and the terms and conditions of each Temporary Relocation Approval Letter issued by the Executive Secretary for relocation. This Approval Letter will be based on the DAQ analysis of the information submitted to the Executive Secretary in the Notice of Temporary Relocation Form. [R307-401]
- II.B.1.b Equipment listed in this AO can be replaced by other equipment of equal or lesser production capacity having the same function as the existing equipment with written notification to the Executive Secretary, and adherence to the DAQ "Replacement in Kind" provision.

  [R307-401-11]
- II.B.1.c Prior to operating equipment at any site, the owner/operator shall obtain a Temporary Relocation Approval Letter. Temporary relocations shall not exceed 180 operating days in any calendar year not to exceed 365 consecutive days, starting from the initial relocation date, at any site. Relocations expected to exceed 180 operating days shall be preceded with a NOI for a permanent source and a valid AO shall be obtained prior to the end of the 180 days.

The DAQ needs at least ten working days for processing and issuing a Temporary Relocation Approval Letter; however, Notices of Temporary Relocation may be submitted as soon as the details on equipment to be used and when the equipment will be at each specific site are available. Notices of Temporary Relocation shall include the following information (Form 15a is available from the DAQ):

- A. The location of the proposed site.
- B. The expected startup and completion dates for operating at the proposed site.
- C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the plant boundary is located within one mile of these buildings).
- D. A list of the equipment to be operated at the proposed site.
- E. Additional emission control measures for various emission points that the source proposes to adopt at each site, which will require application of emission controls beyond the control measures required by this AO.
- F. Include a reference to this AO [R307-401-17]

- II.B.1.d The owner/operator shall be allowed to relocate any of the equipment listed in this AO to any location approved by the Temporary Relocation Approval Letter. The Temporary Relocation Approval Letter shall list the allowable emissions for the relocation based on the aggregate production capacity, the projected hours of operation during the period of relocation, and the degree of enforceable emissions control that the source proposes to adopt during the period of relocation. [R307-401]
- II.B.1.e Before granting a Temporary Relocation Approval Letter, the proposed site will be evaluated by the Executive Secretary to verify that the plant will not cause a new violation of the NAAQS. This evaluation will be based on the computer dispersion modeling conducted by the DAQ and information that shall be submitted in the Notice of Temporary Relocation. If violations of the NAAQS are suspected at the proposed site, the owner/operator shall be required to:
  - A. Apply air pollution controls at the proposed site which are more stringent than those outlined in the conditions of this AO and/or
  - B. Perform continuous ambient monitoring for  $PM_{10}$  for at least the first 30 days of operation to demonstrate that the applicable NAAQS are not violated at the site under normal operating conditions. Monitoring shall be initiated only after consultation with DAQ and carried out in accordance with the Utah DAQ guidelines. [R307-401]
- II.B.1.f Temporary sources that plan to relocate to sites listed in the Utah  $PM_{10}$  State Implementation Plan ( $PM_{10}$  SIP) shall be required to meet standards and adopt control strategies listed in the  $PM_{10}$  SIP for the site, if the  $PM_{10}$  SIP requirements for the site are more stringent than the requirements specified in the conditions of this AO. For sources that submit a Notice of Temporary Relocation to relocate to a site that is listed in the  $PM_{10}$  SIP, the requirements under which the source would be required to operate shall be specified in the Temporary Relocation Approval Letter. [R307-401]
- II.B.1.g Prior to granting the Temporary Relocation Approval Letter for operation at any site, the DAQ will verify that the total emissions from the site (or other sites that are considered to be adjacent or contiguous to the site) for all equipment owned or operated by a company over any 12-month period does not exceed major source thresholds, at each site. These thresholds are 100 tons per year of non-HAPs, 25 tons per year of any combination of HAPs and 10 tons per year of any single HAP. [R307-401]
- II.B.1.h The owner/operator shall maintain records of actual hours of operation at each site for the equipment listed in this AO. These records shall be summarized for each piece of equipment at the completion of operation at each site, or every six months, whichever comes first (or as directed by the Executive Secretary) and made available to the Executive Secretary or the Executive Secretary's representative upon request. [R307-401]
- II.B.1.i In the case of any discrepancy between the Conditions of this AO and the Temporary Relocation Approval Letter, the source shall be required to comply with the site-specific requirements in the Temporary Relocation Approval Letter. [R307-401]

- II.B.1.j The actual hours of operation of the plant shall not exceed 16 hours during any 24-hr period (from midnight to midnight). The actual time of operation shall be between 6:00 AM and 10:00 PM. The hours of operation may be altered upon approval of the Executive Secretary. Any request for a change in these hours shall include modeling showing that all NAAQS are met. [R307-401]
- II.B.1.k Records of daily production and hours of operation shall be kept for all periods when the plant is in operation. The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Executive Secretary or the Executive Secretary's representative. Records of daily production shall be made available to the Executive Secretary or the Executive Secretary's representative upon request. [R307-401]
- II.B.1.1 Unless otherwise specified in this AO, visible emissions from the following emission points shall not exceed the following values:
  - A. All crushers 15% opacity
  - B. All screens 10% opacity
  - C. All conveyor transfer points 10% opacity
  - D. All diesel engines 20% opacity
  - E. All conveyor drop points 20% opacity
  - F. All other points 20% opacity [R307-101]
- II.B.1.m Tru Crushing shall use diesel as a primary fuel. [R307-401]
- II.B.2 <u>Haul Roads and All Fugitive Dust Sources associated with the equipment listed in this AO</u> shall be subject to the follow
- II.B.2.a The speed of mobile equipment (trucks, front end loaders, etc.) shall not exceed 15 miles per hour. The haul road speed shall be posted, at a minimum, on site at the beginning of the haul road so that it is clearly visible from the haul road. [R307-401]
- II.B.2.b Open area limitations are as follows:
  - A. The area occupied by the storage piles generated by this operation shall not exceed 1.5 acres.
  - B. The area disturbed by this operation, which is not stabilized to prevent wind erosion, shall not exceed 5.0 acres.
  - C. Dust control of disturbed or stripped areas shall be required at all times for the duration of the project/operation. [R307-205] &. [R307-309]

- II.B.2.c Unless otherwise specified in this AO, the owner/operator shall conduct opacity observations for all sources on site by 40 CFR 60, Appendix A Method 9. Initial visible observations of opacity shall be conducted for all crushers, screens, and conveyor transfer points. Observations shall meet the opacity limitations listed in this AO. Initial visible emission observations shall consist of 30 observations of six minutes each in accordance with 40 CFR 60.11(b). The duration of observations may be reduced to comply with 40 CFR 60.675(c)(3) or 40 CFR 60.675(c)(4). A certified observer must be used for these observations. [R307-201] &. [40 CFR 60 Subpart OOO]
- II.B.2.d Visible emission determinations for fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-205] &. [R307-309]
- II.B.2.e The owner/operator shall abide by a FDCP acceptable to the Executive Secretary for control of all dust sources associated with the equipment listed in this AO. The owner/operator shall submit a FDCP to the Executive Secretary with the Notice of Temporary Relocation for each temporary site. [R307-309]
- II.B.2.f The owner/operator shall conduct its operations in such a way to minimize fugitive dust and fugitive emissions by abiding by all applicable requirements of R307-205 (statewide) and R307-309 for ( $PM_{10}$  non-attainment areas of Salt Lake, Utah, Davis Counties and Ogden City). [R307-205] &. [R307-309]
- II.B.2.g The owner/operator shall install water sprays or chemical dust suppression sprays on all crushers, all screens, and all unenclosed conveyor transfer points at each temporary site to control fugitive emissions. Sprays shall operate as needed to maintain the opacity limits listed in this AO. [40 CFR 60 Subpart OOO]
- II.B.2.h In addition to the requirement of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A (General Provisions), 40 CFR 60.1 to 60.18, and Subpart OOO, 40 CFR 60.670 to 60.676 (Standard of Performance for Nonmetallic Mineral Processing Plants) apply to this installation. [40 CFR 60 Subpart OOO]

#### **Section III: APPLICABLE FEDERAL REQUIREMENTS**

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NSPS (Part 60), OOO: Nonmetallic Mineral Processing Plants

NSPS (Part 60), A: General Provisions

## **PERMIT HISTORY**

The final AO will be based on the following documents:

Is Derived From NOI dated November 26, 2008

Supersedes DAQE-AN0121420008-08 dated June 3, 2008

#### **ACRONYMS**

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR Title 40 of the Code of Federal Regulations

AO Approval Order ATT Attainment Area

BACT Best Available Control Technology

CAA Clean Air Act

CAAA Clean Air Act Amendments

CDS Classification Data System (used by EPA to classify sources by size/type)

CEM Continuous emissions monitor

CEMS Continuous emissions monitoring system

CFR Code of Federal Regulations

CO Carbon monoxide

COM Continuous opacity monitor

DAQ Division of Air Quality (typically interchangeable with UDAQ)
DAQE This is a document tracking code for internal UDAQ use

EPA Environmental Protection Agency

HAP or HAPs Hazardous air pollutant(s)

ITA Intent to Approve

MACT Maximum Achievable Control Technology

NAA Nonattainment Area

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standards for Hazardous Air Pollutants

NOI Notice of Intent NO<sub>x</sub> Oxides of nitrogen

NSPS New Source Performance Standard

NSR New Source Review

 $\begin{array}{ll} PM_{10} & Particulate \ matter \ less \ than \ 10 \ microns \ in \ size \\ PM_{2.5} & Particulate \ matter \ less \ than \ 2.5 \ microns \ in \ size \\ \end{array}$ 

PSD Prevention of Significant Deterioration

R307 Rules Series 307

R307-401 Rules Series 307 - Section 401

SO<sub>2</sub> Sulfur dioxide

Title IV Title IV of the Clean Air Act
Title V Title V of the Clean Air Act
UAC Utah Administrative Code

UDAQ Utah Division of Air Quality (typically interchangeable with DAQ)

VOC Volatile organic compounds